

**MANAGEMENT OF BEACHES/PUBLIC OUTREACH AND COMMUNICATION
HIGH PRIORITY RECOMMENDATIONS**

EDUCATION AND PUBLIC OUTREACH

- ✓ Focus on public schools and opportunities to use other programs and venues (for example, Lake Michigan Boat Tour)
- ✓ Increase understanding of sources and types of E. coli

PARTNERSHIP

- ✓ Partnership with the media to increase their involvement in public awareness and education

FUNDING

- ✓ Identify federal funding resources and establish strong partnerships

TECHNOLOGY

- ✓ Expand the use of Internet technology and wireless communication to educate and promote awareness

ESTABLISH PARTNERSHIPS WITH METEOROLOGISTS

- ✓ Establish partnerships with meteorologists to enhance the use of predictive modeling in forecasting potential or actual beach closure events

AUDIENCE IDENTIFICATION

- ✓ Define demographics – who the audience is and what the most effective tools are for reaching the audience

COMMUNICATION

- ✓ Increase the level of quality of the information to be communicated and the communication tools, including universal signage for communicating beach advisory information
- ✓ Consult the community regarding the most effective means of communication

NOTIFICATION

- ✓ Develop a notification process to disseminate water quality, marine conditions, and beach information (for example, utilize “fax notification”; public media such as a.m. radio; Internet)

JURISDICTION

- ✓ Identify the agency or entity that has jurisdiction over and responsibility for each beach

- ✓ Identify the agency or entity that has the legal responsibility to monitor each beach

ROLE OF HEALTH DEPARTMENT

- ✓ Establish whether the health department should interpret the data or whether interpretation should be determined in advance

MINIMUM MONITORING

- ✓ Specify the minimum monitoring requirements for a beach to satisfy policy makers and the general public

STORMWATER

- ✓ Require regular urban monitoring; improve stormwater management at beaches, for example, as part of the Phase II Stormwater Program
- ✓ Develop improved instrumentation for urban and sewer assessments

SANITARY SURVEYS

- ✓ Require regular sanitary surveys for all beaches
- ✓ Establish methods for implementing bather loads and use assessment

STANDARD PROCEDURES

- ✓ Develop a systematic approach or protocol for source assessments
- ✓ Establish website that details monitoring procedures and presents prior data
- ✓ Communicate with all partners and stakeholders to improve information collection and management
- ✓ Identify all processes in lakes that affect water quality

COORDINATION

- ✓ Get local planning departments to work with beach managers
- ✓ Help beach managers to identify all governmental parties that impact beaches (for example, via a flowchart or guidance)

MANAGEMENT OF BEACHES/PUBLIC OUTREACH AND COMMUNICATION

Following the Management of Beaches/Public Outreach and Communication Overview presentation, which discussed various state and local case studies, the audience broke into one of four groups:

- Establishing a Monitoring Program
- Establishing a Risk Communication/Notification Program
- Collaboration/Partnerships
- Assessing Your Site: Identifying Sources of Contamination

Establishing a Monitoring Program

About 15 people attended the Establishing a Monitoring Program Breakout Session. Mr. Gary White spent the first few minutes answering some general questions about monitoring and then the group began identifying recommendations. The group produced the following nine recommendations.

1. Identify the agency or entity that has jurisdiction over each beach.
2. Establish whether the health department should interpret the data or whether interpretation should be determined in advance.
3. Establish correlations with weather events, including rainfall and wind direction.
4. Specify whether data from other beaches can be applied to an unmonitored beach.
5. Identify the agency or entity that has the legal responsibility to monitor each beach.
6. Specify the minimum monitoring requirements for a beach to satisfy policy makers and the general public.
7. Communicate the potential of risk to beach patrons.
8. Establish or identify funding sources for groups that are engaged in developing a beach monitoring program.
9. Identify sources of beaches impairments and correct them.

Several jurisdiction-related recommendations were combined, as well as recommendations related to establishing correlations.

HIGH PRIORITY

1. **Jurisdiction.** (Combined R1 and R5) Identify the agency or entity that has jurisdiction over and responsibility for each beach; identify the agency or entity that has the legal responsibility to monitor each beach.
2. **Role of Health Department.** (R2) Establish whether the health department should interpret the data or whether interpretation should be determined in advance.
3. **Minimum Monitoring.** (R6) Specify the minimum monitoring requirements for a beach to satisfy policy makers and the general public.
4. **Communication.** (R7) Communicate the potential risk to beach patrons.

5. **Funding.** (R8) Establish or identify funding sources for groups that are engaged in developing a beach monitoring program.
6. **Sources of Impairment.** (R9) Identify sources of beach impairments and correct them.

MEDIUM PRIORITY

1. **Correlations.** (Combined R3 and R4) Establish correlations with weather events, including rainfall and wind direction; specify whether data from other beaches can be used for an unmonitored beach.

LOW PRIORITY

None

Establishing a Risk Communication/Notification Program

About 40 people attended the Establishing a Risk Communication/Notification Program Breakout Session. Mr. Dale Engquist opened the session and provided an overview of the session objectives. The group then began discussion and identification of the 16 recommendations listed below.

1. Identify the audience to whom information should be directed (who should receive the information?).
2. Develop a notification process to disseminate water quality, marine conditions, and beach information (for example, utilize "fax notification"; public media such as a.m. radio; Internet).
3. Implement "water quality advisory: announcements, similar to "ozone action days," and provide information to the media.
4. Consider multilingual needs.
5. Inform and educate beach staff (i.e., lifeguards and maintenance staff) so they will be better equipped to educate the public about health risks.
6. Develop standardized, simple language to be used "universally" to communicate messages regarding beach closings and water quality advisories (for example, red, yellow, and green colors; 1 to 5 rating system; circle with line through it – things people can readily identify).
7. Make water quality and beach closing notifications regional in scope, encompassing the total area of visitors (to the extent possible).
8. Establish a centralized place or "clearinghouse" to (1) collect beach closure and water quality information from a variety of sources and (2) develop a strategy for disseminating the information (for example, one information source for all Milwaukee area beaches, etc.); this could be a role for the media.

9. Include in risk communication efforts things people can do or steps to take – similar to messages delivered to the public on ozone action days.
10. Better educate the media and improve their understanding so they can better and more accurately report water quality and beach closing information.
11. Develop universal signage for communicating beach advisory information.
12. Reach out to public schools and educate kids and teachers; seize opportunities (such as health days, earth day, etc.) And put up booths at school fairs; emphasize “what you can do/shouldn’t do”.
13. Distinguish between and educate the public about differences between environmental, human, and animal E. coli sources.
14. Consider linking public outreach efforts to existing initiatives, such as the Stormwater Phase II and TMDL programs, that may be used as vehicles to fund outreach and education activities.
15. Consult the community – ask for their input on the most effective public involvement and risk communication process and methods.
16. Establish “baseline” standards for minimally-accepted risk communication (for example, what is the minimally acceptable level of communication for “low priority” beaches?).

HIGH PRIORITY

1. **Audience.** (R1) Identify the audience to whom information should be directed (who should receive the information?).
2. **Notification Process.** (R2) Develop a notification process to disseminate water quality, marine conditions, and beach information (for example, utilize “fax notification”; public media such as a.m. radio; Internet).
3. **Communication.** (R11) Develop universal signage for communicating beach advisory information.
4. **Education and Public Outreach.** (R12) Reach out to public schools and educate kids and teachers; seize opportunities (such as health days, earth day, etc.) And put up booths at school fairs; emphasize “what you can do/shouldn’t do.”
5. **E. Coli Sources.** (R13) Distinguish between and educate the public about differences between environmental, human, and animal E. coli sources.
6. **Community Input.** (R15) Consult the community – ask for their input on the most effective public involvement and risk communication process and methods.
7. **Standards.** (R16) Establish “baseline: standards for minimally-accepted risk communication (for example, what is the minimally acceptable level of communication for “low priority” beaches?).

MEDIUM PRIORITY

1. **Communication.** (R3) Implement “water quality advisory” announcements, similar to “ozone action days”, and provide information to the media.
2. **Multilingual.** (R4) Consider multilingual needs.
3. **Education.** (R5) Inform and educate beach staff (i.e., lifeguards and maintenance staff) so they will be better equipped to educate the public about health risks.
4. **Notifications.** (R7) Make water quality and beach closing notifications regional in scope, encompassing the total area of visitors (to the extent possible).
5. **Language.** (R6) Develop standardized, simple language to be used “universally” to communicate messages regarding beach closings and water quality advisories (for example, red, yellow, and green colors; 1 to 5 rating system; circle with line through it – things people can readily identify).
6. **Information Source.** (R8) Establish a centralized place or “clearinghouse” to (1) collect beach closure and water quality information from a variety of sources and (2) develop a strategy for disseminating the information (for example, one information source for all Milwaukee area beaches, etc.); this could be a role for the media.
7. **Communications.** (R9) Include in risk communication efforts things people can do or steps to take – similar to messages delivered to the public on ozone action days.
8. **Funding.** (R14) Consider linking public outreach efforts to existing initiatives, such as the Stormwater Phase II and TMDL programs. That may be used as vehicles to fund outreach and education activities.

LOW PRIORITY

1. **Media.** (R10) Better educate the media and improve their understanding so they can better and more accurately report water quality and beach closing information.

Collaboration Partnerships

The group discussed several issues associated with establishing partnerships and then developed several recommendations to overcome some of these issues. The 10 recommendations are presented below.

1. Increase local media involvement by first educating the media, then developing relationships and using the media to educate the public and maintain pressure on local officials and decision makers.
2. Expand the use of all types of media to educate the public, making sure all data is in order to establish and maintain credibility.

3. Increase the use of intense technology , such as websites and wireless communication to promote awareness, advertise, and educate.
4. Establish partnerships with meteorologists and communications to enhance the use of predictive modeling in forecasting potential or actual beach closure events.
5. Nurture partnerships by providing funding.
6. Establish a strong group of cooperative partnerships with agencies like USGS to obtain funding that will attract other organizations to the group.
7. Define demographics – who the audience is and what the most effective tools are for reaching the audience.
8. Increase the level of the information to be communicated and the communication tools.
9. Use other programs, venues, and opportunities such as the Lake Michigan Boat Tour, to promote awareness.
10. Use the federal government to develop and distribute information to the local levels; place tools, information, databases, models on the Internet to increase their availability at all levels.

All of the above recommendations were deemed high priority.

Assessing Your Site: Identifying sources of Contamination

About 30 people attended the Assessing Your Site: Identifying Sources of Contamination Breakout Session. The group's brainstorming efforts produced the following 19 recommendations.

1. Require regular urban monitoring.
2. Require regular sanitary surveys for all beaches.
3. Improve stormwater management at beaches, for example, as part of the Phase II Stormwater Program.
4. Assess coastal processes, for example, by examining sediment core samples for legacy pollutants.
5. Account for legacy pollutants in sediments when assessing dredging projects.
6. Develop a systematic approach or protocol for source assessments.
7. Establish methods for implementing bather loads and use assessment.

8. Develop improved instrumentation for urban and sewer assessments.
9. Provide regular updates on molecular typing.
10. Improve enforcement of National Pollutant Discharge Elimination System (NPDES) Permits, for example, by increasing staff.
11. Establish website that details monitoring procedures and presents prior data.
12. Communicate with all partners and stakeholders to improve information collection and management.
13. Identify all processes in lakes that affect water quality.
14. Identify dredge material dump sites.
15. Get local planning departments to work with beach managers.
16. Collect information on combined sewer overflow bypasses; provide notices to local health departments.
17. Help beach managers to identify all governmental parties that impact beaches, for example, via a flowchart or guidance.
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19. Conduct additional checks on U.S. Army Corps of Engineers accountability for dredging projects.
20. Educate private beach operators and local health departments about assessing sources of contamination.

Several stormwater-related recommendations were combined, as well as recommendations related to sanitary surveys, standard procedures, coordination, and sediment and dredging projects.

HIGH PRIORITY

1. **Stormwater.** (Combined R1, R3, and R8) Require regular urban monitoring; improve stormwater management at beaches, for example, as part of the Phase II Stormwater program; develop improved instrumentation for urban and sewer assessments.
2. **Sanitary Surveys.** (Combined R2 and R7) Require regular sanitary surveys for all beaches; establish methods for implementing bather loads and use assessment.
3. **Standard Procedures.** (Combined R6, R11, R12, and R13) Develop a systematic approach or protocol for source assessments; establish website that details monitoring procedures and presents prior data; communicate with all partners and stakeholders to improve information collection and management; identify all processes in lakes that affect water quality.
4. **CSOs.** (R16) Collect information on combined sewer overflow bypasses; provide notices to local health departments.

5. **Coordination.** (Combined R15 and R17) Get local planning departments to work with beach managers; help beach managers to identify all governmental parties that impact beaches, for example, via a flowchart or guidance.

MEDIUM PRIORITY

1. **Sediment and Dredging Projects.** (Combined R4, R5, R14, and R18) Assess coastal processes, for example, by examining sediment core samples for legacy pollutants; account for legacy pollutants in sediments when assessing dredging projects; identify dredge material dump sites; conduct additional checks on U.S. Army Corps of Engineers accountability for dredging projects.
2. **Pathogens.** (R9) Provide regular updates on molecular typing.
3. **NPDES Permits.** (R10) Improve enforcement of National Pollutant Discharge Elimination System (NPDES) Permits, for example, by increasing staff.
4. **Education.** (R19) Educate private beach operators and local health departments about assessing sources of contamination.

LOW PRIORITY

None